

In the claims:

The claims standing for examination are reproduced below. There are no amendments to the claims or specification made in this response.

1. (currently amended) A method of controlling data traffic at a node on a network, said node having at least one output coupled to at least one link on the network, said method comprising:

defining a bandwidth value for the at least one link related to a maximum amount of data to be transferred on the link;

providing a plurality of queues for storing data to be transferred on the at least one link;

assigning a queue value to each of the plurality of queues, each of said queue values being related to a preference for transferring data from its assigned queue onto the link; and

assigning a data limit value to each of the plurality of queues, an amount of data being transferred onto the link from each queue being limited by the data limit value assigned to the queue, and each of said data limit values being derived from the bandwidth value for the at least one link, wherein if one of the plurality of queues has no data traffic, said queue's data traffic capacity is allocated among the other queues;

wherein characterized in that the queue value is selectively assigned to a specific queue independent from and regardless of tolerable delay of its assigned data based on preferences for transferring the data from its assigned queue onto the link, and further characterized in that after the initial queue value assignment, further changes to the queue value for each queue may be selectively changed based on other preferences for transfer of the data onto the link.

2. (original) The method of claim 1, wherein the queue values are priority values, each priority value defining a priority for transferring data stored in the associated queue onto

the link.

3. (original) The method of claim 2, wherein each of the data limit values assigned to the queues is related to a percentage of the bandwidth value.

4. (original) The method of claim 1, wherein each of the queue values defines a weight for its assigned queue, the plurality of queues transferring data onto the link according to the weights of the plurality of queues.

5. (original) The method of claim 4, wherein each of the data limit values assigned to the queues is related to a percentage of the bandwidth value.

6. (original) The method of claim 1, wherein each of the data limit values assigned to the queues is related to a percentage of the bandwidth value.

7. (currently amended) An apparatus for controlling data traffic at a node on a network, comprising:

an output interface coupled to at least one link on the network for transferring data toward the at least one link, the at least one link being associated with a bandwidth value related to a maximum amount of data to be transferred on the link;

a plurality of queues for storing data to be transferred via the output interface; and
at least one processor for (i) assigning a queue value to each of the plurality of queues, each of said queue values being related to a preference for transferring data from its assigned queue onto the link, and (ii) assigning a data limit value to each of the plurality of queues such that an amount of data being transferred onto the link from each queue is limited by the data limit value assigned to the queue, each of said data limit values being derived from the bandwidth value for the at least one link (iii) reallocating the data limit value from at least one of said plurality of queues among the other queues when the at least one queue has no data traffic;

~~wherein~~ characterized in that the queue value is selectively assigned to a specific queue ~~independent from and regardless of tolerable delay of its assigned data based on preferences for transferring the data from its assigned queue onto the link, and further~~ characterized in that after the initial queue value assignment, further changes to the queue value for each queue may be selectively changed based on other preferences for transfer of the data onto the link.

8. (original) The apparatus of claim 7, wherein the queue values assigned by the at least one processor are priority values, each priority value defining a priority for transferring data stored in the associated queue onto the link.

9. (original) The apparatus of claim 8, wherein each of the data limit values assigned by the at least one processor is related to a percentage of the bandwidth value.

10. (original) The apparatus of claim 7, wherein:

each of the queue values assigned by the at least one processor defines a weight for its assigned queue; and

the plurality of queues transfers data onto the link according to the weights of the plurality of queues.

11. (original) The apparatus of claim 10, wherein each of the data limit values assigned by the at least one processor is related to a percentage of the bandwidth value.

12. (original) The apparatus of claim 7, wherein each of the data limit values assigned by the at least one processor is related to a percentage of the bandwidth value.